Installation Instructions

Built-In Dishwasher

Model(s):
DDW2405W DDW2405BL DW2406BLS

BEFORE YOU BEGIN: Read these instructions completely and carefully.

IMPORTANT: Observe all governing codes and ordinances.

Note to the Installer: Be sure to leave these instructions for the consumer's and local inspectors use.

Note to Consumer: Keep these instructions with your Owner's Manual for future reference.

Skill Level: Installation of this dishwasher requires basic mechanical and electrical skills.

Proper installation is the responsibility of the installer. Product failure due to improper installation is not covered under the Dishwasher Warranty.

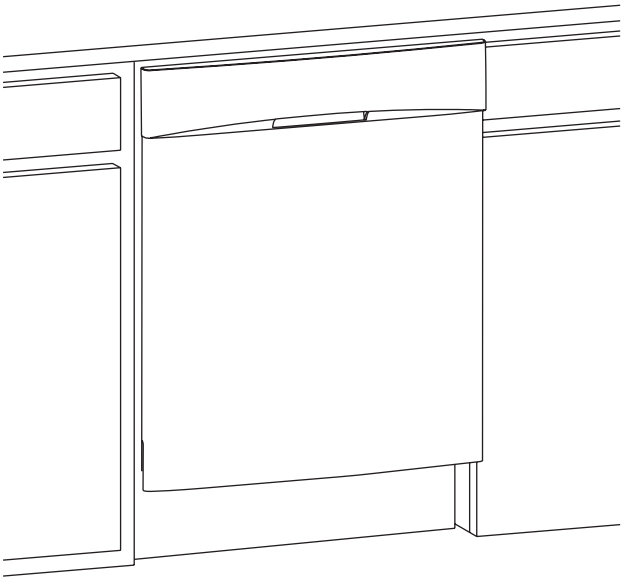
Completion Time 1 to 3 Hours.

New installations require more time than replacement installations.

IMPORTANT: The dishwasher **MUST** be installed to allow for removal from the enclosure in the event future service is required.

FOR YOUR SAFETY: Read and observe all CAUTIONS and WARNINGS shown throughout these instructions. While performing installations described in this booklet, gloves, safety glasses or goggles should be worn.

WARNING: To reduce the risk of electrical shock, fire or injury to persons, the installer must ensure that the dishwasher is completely enclosed at the time of installation



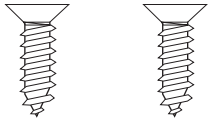
READ CAREFULLY.

KEEP THESE INSTRUCTIONS.

Installation Preparation

PARTS SUPPLIED:

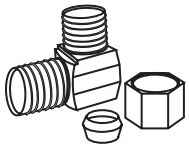
- Two #8 Phillips flat head wood screws 5/8" long to secure dishwasher to underside of countertop. (Screws can be found inside the literature package)



2 Wood Screws

MATERIALS YOU WILL NEED: (Not included)

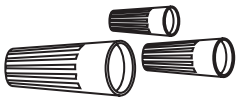
- Ferrule, compression nut and elbow (3/8" NPT external thread on one end, opposite end sized to fit water supply)
- Thread seal tape
- cUL Listed wire nuts (3)
- Air gap for drain hose, if required
- Waste tee for house plumbing, if applicable
- 48" Electrical cable (power supply)
- Screw type hose clamps
- Hand shut-off valve
- Water line; Stainless steel braided flex hose
- Coupler for extending drain line, if applicable



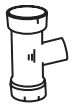
90 Elbow, Ferrule and Compression Nut

Hand Shut-Off Valve

Thread Seal Tape

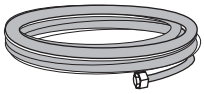


Wire Nuts (3)



Waste Tee

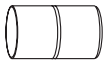
48" Electrical Cable



72" Stainless Steel Braided Flex Hose

Air Gap

Screw Type Hose Clamps

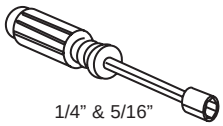


Coupler

TOOLS YOU WILL NEED:

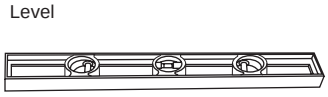
- Phillips Head Screwdriver
- 5/16" and 1/4" Nut-driver
- 6" Adjustable Wrench
- Level
- Carpenters Square
- Measuring Tape
- Safety Glasses
- Flashlight
- Bucket to Catch Water (flushing the line)
- Gloves
- Tube Cutter
- Drill and appropriate bits
- Hole Saw Set

Phillips Head Screwdriver



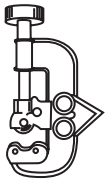
1/4" & 5/16" Nut-driver

Level



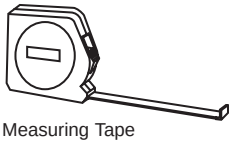
Flashlight

6" Adjustable Wrench



Tube Cutter

Carpenters Square

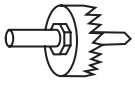


Measuring Tape

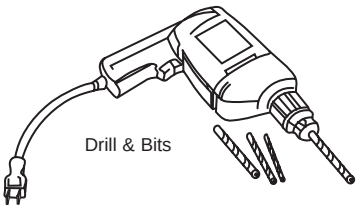
Bucket

Safety Glasses

Gloves



Hole Saw Set



Drill & Bits

INSTALLATION PREPARATION

PREPARE DISHWASHER ENCLOSURE

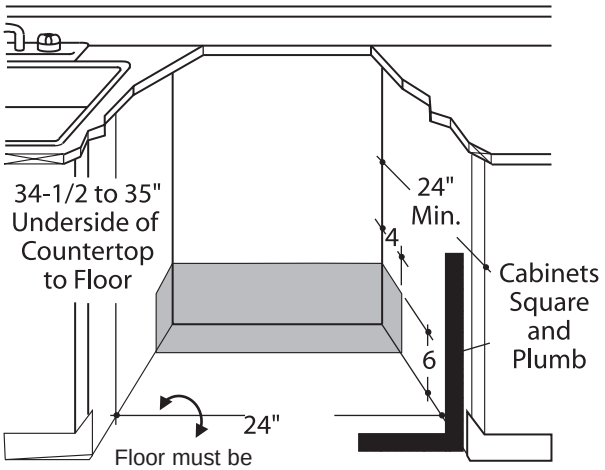


Figure 1

- The rough cabinet opening must be at least 24” deep and to 24” wide. The opening should be to 35” max height.
- The dishwasher must be installed so that the drain hose is no more than 10 feet in length for proper drainage.
- The dishwasher must be fully enclosed on the top, side and back, and must not support any part of the enclosure.

CLEARANCES: When installed into a corner, allow 2” min. clearance between dishwasher and adjacent cabinet, wall or other appliances. Allow 25-5/8” min. clearance from the front of the dishwasher for the door opening. Fig. 2

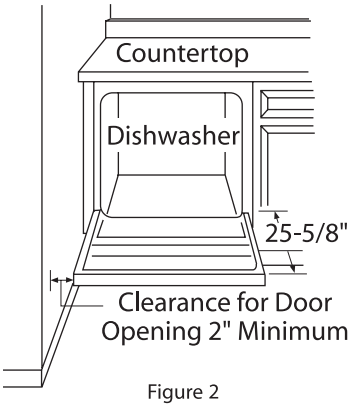


Figure 2

DRAIN REQUIREMENTS:

- Follow local codes and ordinances.
- Do not exceed 10 feet in distance to the drain.
- Do not connect drain lines from other devices to the dishwasher drain hose.
- Dishwasher must be connected to waste line with an air gap (not supplied) or 32” minimum high drain loop, depending on local codes and ordinances to prevent back flow into the dishwasher. Air gap must be used if waste tee or disposer connection is less than 18” above the floor to prevent siphoning.

DRAIN PREPARATION:

The type of drain installation depends on answers to the following questions:

☐ Do local codes or ordinances require installation of an air gap?

☐ Will waste tee or disposer connection be less than 18” above the floor?

If the answer to **ANY** of the 2 questions above is **YES, METHOD 1 MUST BE USED.** Otherwise either **Method 1 or Method 2 may be used.** Fig. 3 or Fig. 4

CAUTION:

An air gap **MUST BE USED** if the drain hose is connected to waste tee or disposer lower than 18” above the floor.

Failure to provide the proper drain connection height with an air gap or 32” minimum high drain loop will result in improper draining of the dishwasher.

Method 1 Air Gap with Waste Tee or disposer

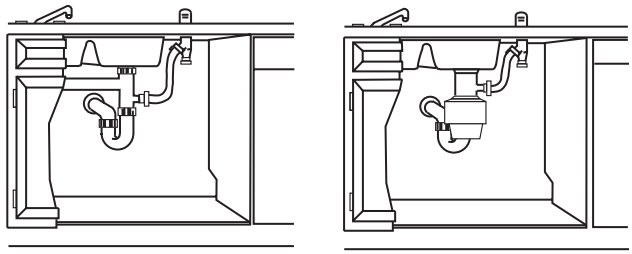


Figure 3

Method 2 High Drain with Waste Tee or Disposer

Provide a method to attach drain hose to underside of countertop.

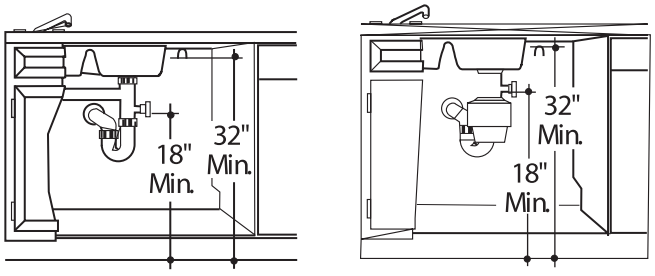


Figure 4

CABINET PREPARATION:

- Drill a 1-1/2” dia. hole in the cabinet wall within the shaded areas shown in Fig. 1 for drain hose connection. The hole should be smooth with no sharp edges.

INSTALLATION PREPARATION

PREPARE ELECTRICAL WIRING

WARNING:
FOR PERSONAL SAFETY:
Remove house fuse or open circuit breaker before beginning installation. Do not use an extension cord or adapter plug with this appliance.

Electrical Requirements:

- This appliance must be supplied with 120V / 60 Hz., and connected to an individual properly grounded branch circuit, protected by a 15 or 20 ampere circuit breaker or time delay fuse.
- Wiring must be two wire with ground.
- If the electrical supply does not meet the above requirements, call a licensed electrician before proceeding.

Grounding Instructions This appliance must be connected to a grounded metal, permanent wiring system, or an equipment grounding conductor must be run with the circuit conductors and be connected to the equipment grounding terminal or lead on the appliance.

WARNING:
Improper connection of the equipment grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service representative if you are in doubt that the appliance is properly grounded.

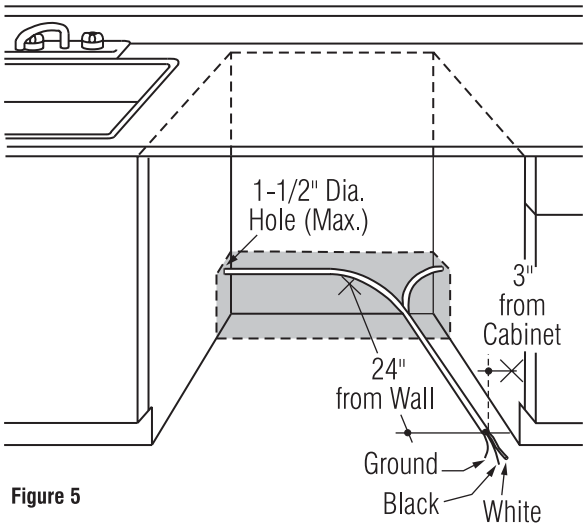


Figure 5

Cabinet Preparation & Wire Routing:

- The wiring may enter the opening from either side, rear or the floor within the shaded area.
- Cut a 1-1/2” max. dia. hole to admit the electrical cable. The hole must be free of sharp edges. If the cabinet wall is metal, the hole edge must be covered with a bushing/grommet.
- Cable direct connections may pass through the same hole as the drain hose and hot water line, if convenient.

Electrical Connection to Dishwasher:

- The electrical connection is located on the right front side of the dishwasher.
- The cable must be routed as shown in Fig. 5 Cable must extend a minimum of 24” from the rear wall.

INSTALLATION INSTRUCTIONS

PREPARE HOT WATER LINE:

- The hot water line may enter from either side, rear or floor within the shaded area shown in Fig. 6
- The line may pass through the same hole as the electrical cable and drain hose. Or, cut an additional 1-1/2” dia. hole to accommodate the water line.

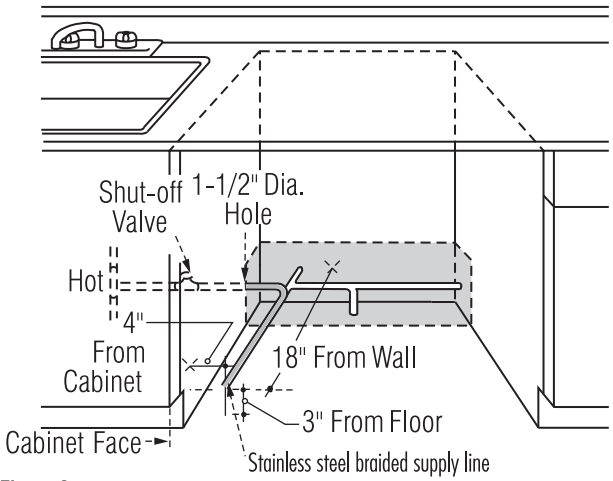


Figure 6

WATER LINE CONNECTION:

- Turn off the water supply.
- Install a hand shut-off valve in an accessible location, such as under the sink.
- The water connection is located on the left front side of the dishwasher. Install the hot water inlet line, using a braided flexible hose (available at most hardware stores). Route the line as shown in Fig. 6 and extend it forward at least 18” from the rear wall.
- Adjust water tank (heater) for 120 F to 150 F (49C to 65.5C) temperature.
- Flush water line to clean out debris.
- The hot water supply line pressure must be 20 ~ 120psi

CAUTION:
DO NOT OPEN THE DOOR UNTIL YOU ARE READY TO INSTALL THE DISHWASHER.

Opening the door will cause the dishwasher to tip forward. If it is necessary to open the door, hold the top of the dishwasher securely with one hand and hold the door with the other hand.

STOP

BEFORE YOU BEGIN

Locate and set aside the package containing the 2 Phillips Head Countertop Mounting Screws.

STEP 1 CHECK DOOR BALANCE

To check the door balance, hold the top of the dishwasher firmly.

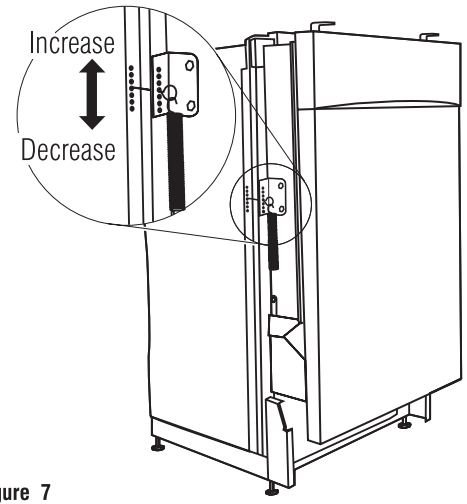


Figure 7

- Open the door slowly, if the door drops when released, increase spring tension. If the door closes when released, decrease spring tension.
- Pull the spring adjustment pin out of the holes, insert into the next highest or lowest hole and test again.
- Adjust both door springs to the same tension.
- Continue moving the spring pin until the door is balanced.

INSTALLATION INSTRUCTIONS

STEP 2 ADJUST LEVELING LEGS

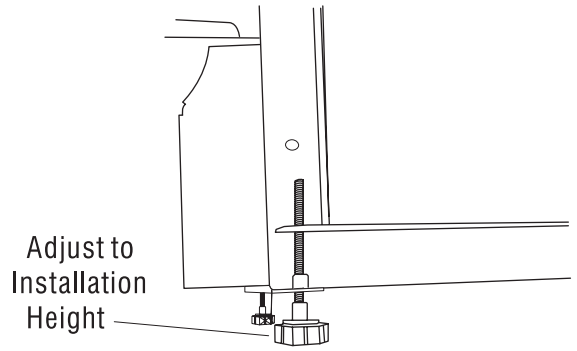


Figure 8

Measure installation height and dishwasher height. Extend leveling legs out from the dishwasher base, 1/4” less than installation height.

STEP 3 Remove Kick Plate

Remove the kickplate screws. Lift off the 2 piece kickplate.

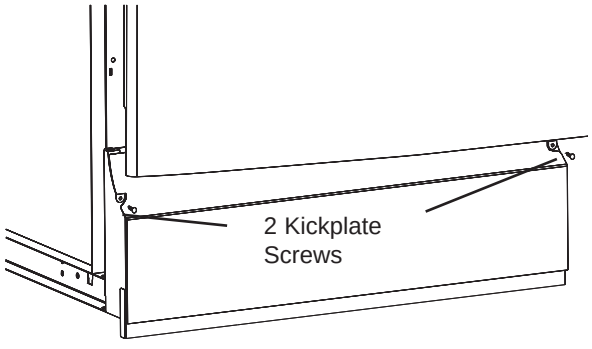


Figure 9

STEP 4 INSTALL 90º ELBOW

Wrap the 90º elbow with thread seal tape, then install it onto the water valve. **To avoid damage to the water valve bracket and/or fitting, do not over-tighten the 90º elbow.** Position the end of the elbow to face the rear of the dishwasher.

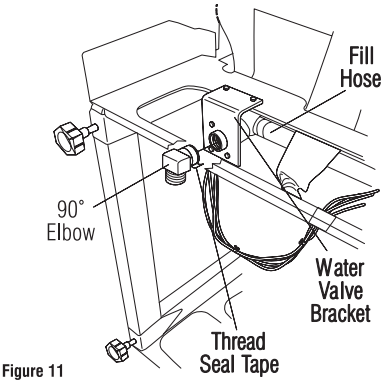


Figure 11

STEP 5 POSITION WATER LINE AND HOUSE WIRING

- Position water supply and house wiring on the floor of the opening to avoid interference with base of dishwasher and components under dishwasher.

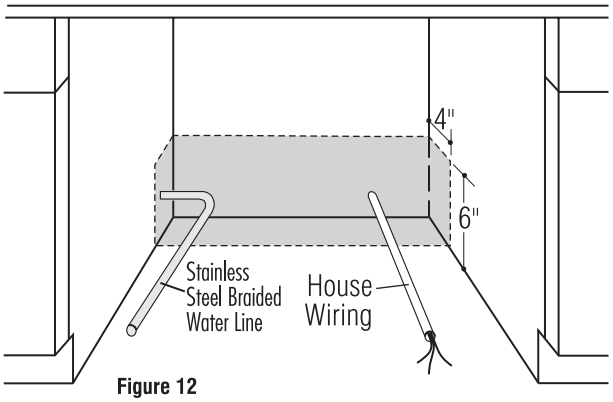


Figure 12

STEP 6 INSERT DRAIN HOSE THROUGH CABINET

- Position the dishwasher in front of he opening. Insert drain hose into cabinet wall hole.

TIP: Position water line and house wiring on the floor to avoid interference with base of dishwasher.

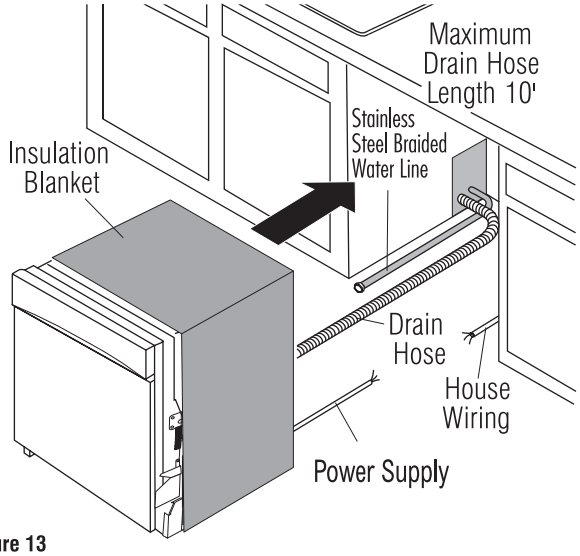


Figure 13

STEP 7 SLIDE DISHWASHER PARTIALLY INTO CABINET

TO AVOID DAMAGING THE FRONT PANEL, DO NOT PUSH CABINET IN WITH KNEES.

- Slide dishwasher into the opening a few inches at a time.
- As you proceed, pull the drain hose through the opening under the sink. Stop pushing when the dishwasher is a few inches forward of adjacent cabinetry.
- Make sure drain hose is not kinked under the dishwasher and there is no interference with the waterline and wiring or any other component.

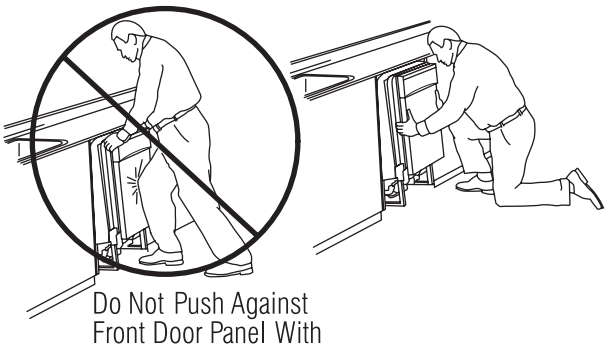


Figure 14

STEP 8 POSITION DISHWASHER UNDER COUNTERTOP

- Check to be sure that wires are secure under the dishwasher and not pinched or in contact with door springs or other dishwasher components.

TIP: Check tub insulation blanket.
It should be positioned so it is not bunched up or interfering with door springs. Check by opening and closing door.

- Push dishwasher into cabinet. The front corners of the dishwasher door should be flush with cabinet doors. Be careful not to dent front panel with knees or damage countertop or cabinets with dishwasher parts.

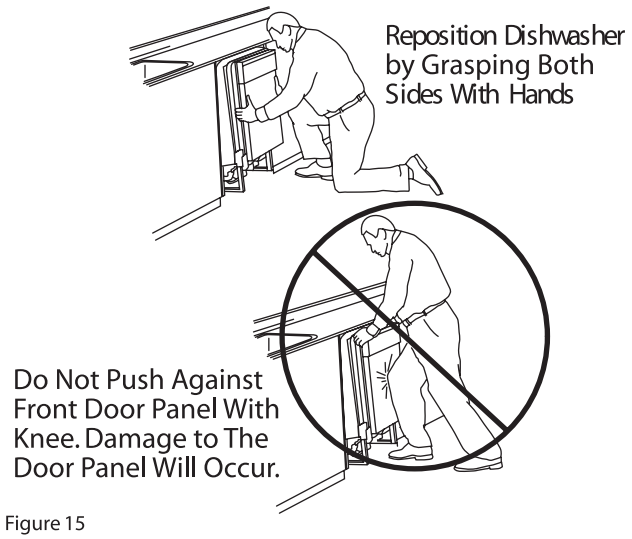

Reposition Dishwasher by Grasping Both Sides With Hands
Do Not Push Against Front Door Panel With Knee. Damage to The Door Panel Will Occur.

Figure 15

STEP 9 LEVEL DISHWASHER

IMPORTANT - Dishwasher must be level for proper dish rack operation and wash performance.

- Place level on door and rack track inside the tub as shown to check that the dishwasher is level.

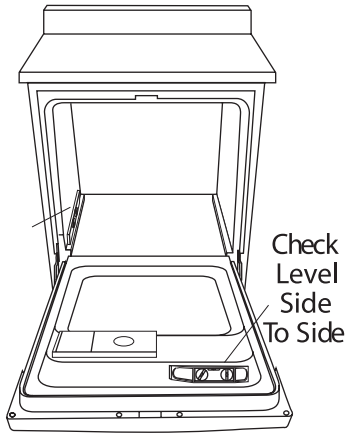


Figure 16

- Level the dishwasher by adjusting the four leveling legs individually.

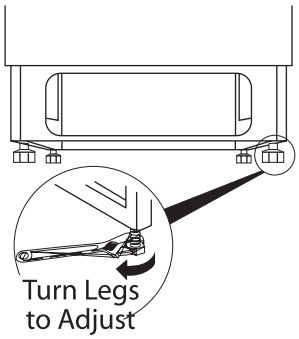


Figure 17

TIP: Pull lower rack out, about halfway. Check to be sure the rack does not roll forward or back into dishwasher. If the rack rolls in either direction, the dishwasher must be leveled again.

- If the door hits the tub, the dishwasher is not installed correctly. Adjust leveling legs to align door to tub.

STEP 10 SECURE DISHWASHER TO CABINET

The dishwasher must be secured to the countertop.

- Position the dishwasher so that the tub flange aligns with the front face of the cabinet frame.

IMPORTANT - Check to be sure the dishwasher is centered in the opening and there is no interference with the adjacent cabinets when opening or closing the door.

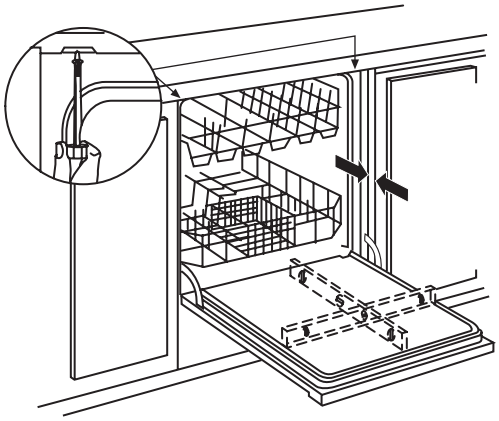


Figure 18

- Fasten the dishwasher to the underside of the countertop with the 2 Phillips screws provided.

IMPORTANT - Drive screws straight and flush. Protruding screw heads will scratch the top of the control panel and can interfere with door opening/closing.

STEP 11 CONNECT WATER SUPPLY

Connect water supply line to 90^{O} elbow.

Method 1 - Braided flex hose

- Connect the stainless steel braided flex hose directly to the 90^{O} elbow (as show in Figure 19)

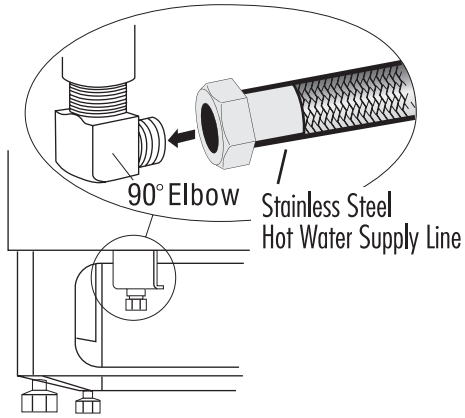


Figure 19

IMPORTANT - Check to be sure that door spring does not rub or contact the fill hose or water supply line. Test by opening and closing the door. Re-route the lines if a rubbing noise or interference occurs.

STEP 12 CONNECT DRAIN LINE

FOLLOW ALL LOCAL CODES
AND ORDINANCES

The drain hose molded end will fit 5/8", 3/4" or 1" diameter connections on the air gap, waste tee or disposer. Cut the marked line as required for your installation.

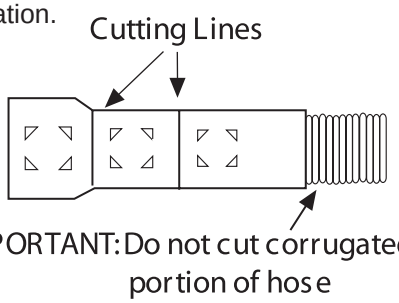


Figure 20

- If a longer drain hose is required, add up to 42" length for a total of 10ft. to the factory installed hose. Use 5/8" or 7/8" inside diameter hose and a coupler to connect two hose ends. Secure the connection with hose clamps.

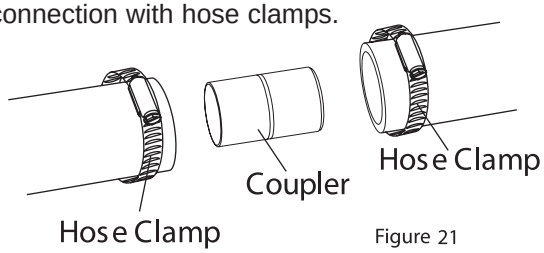


Figure 21

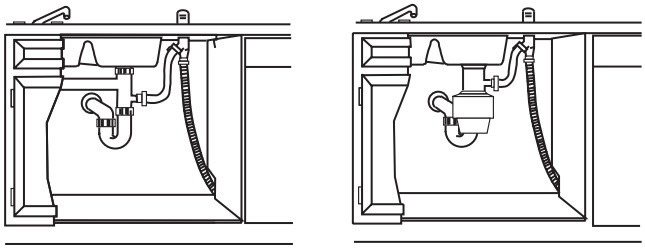
- Secure the drain hose to the air gap, waste tee or disposer with clamps.

NOTE: TOTAL DRAIN HOSE LENGTH MUST NOT EXCEED 10 FEET FOR PROPER DRAIN OPERATION.

DRAIN LINE INSTALLATION

- Connect drain line to air gap, waste tee or disposer using either of the previously determined method.

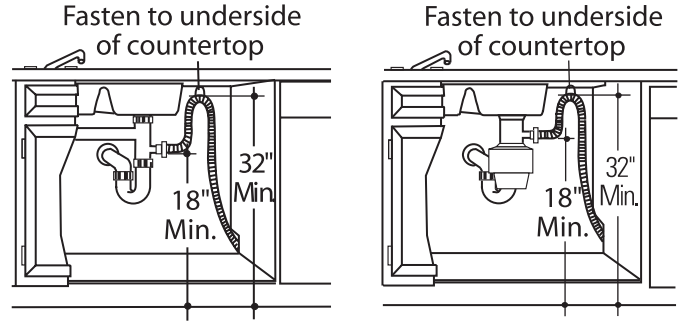
Method 1 - Air gap with waste tee or disposer



Waste Tee Installation Disposer Installation

Figure 22

Method 2 - High drain loop with waste tee or disposer

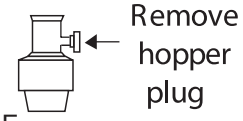


Waste Tee Installation Disposer Installation

Figure 23

IMPORTANT -

When connecting the drain line to the disposer, check to be sure that the drain plug has been removed. DISHWASHER WILL NOT DRAIN IF PLUG IS LEFT IN PLACE.



TIP: Avoid unnecessary service call charges. Always be sure disposer drain plug has been removed before attaching dishwasher drain hose to dispenser.

STEP 13 CONNECT POWER SUPPLY

- Remove junction box Cover " A ".
- Locate the three dishwasher wires, (white, black and green) with stripped ends. Insert dishwasher wires through the small hole in the junction Box " B ".
- Secure house wiring to the bottom of the junction box with a strain relief " C ".
- Use wire nuts to connect incoming ground to green, white to white and black to black " D ".
- Replace junction box cover " E ", check to be sure that wires are not pinched under the cover.

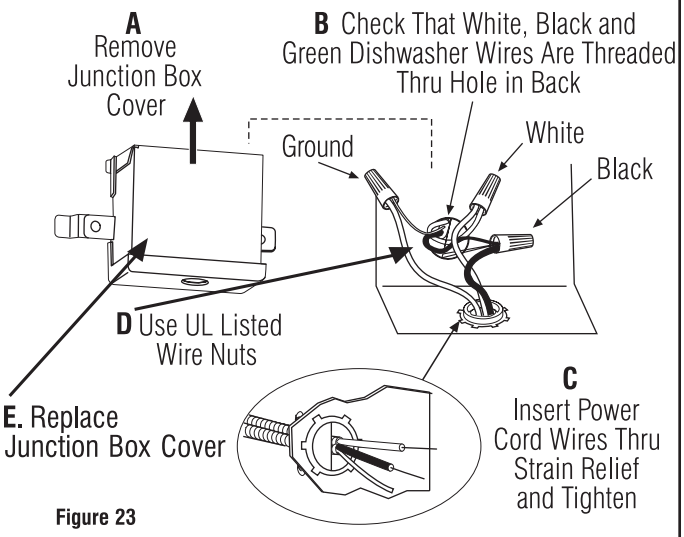


Figure 23

WARNING

If house wiring is not 2-wire with ground, a ground must be provided by installer. When house wiring is aluminum, be sure to use UL listed antioxidant compound and aluminum to copper connectors.

STEP 14 PRE-TEST CHECK LIST

Review this list after installing your dishwasher to avoid charges for a service call that is not covered by your warranty.

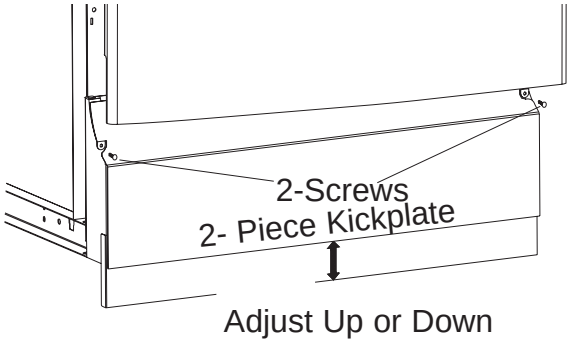
- ☐ Check to be sure Power is OFF.
- ☐ Open door and remove all foam and paper packaging.
- ☐ Locate the Owners manual in the literature package.
- ☐ Read the Owners manual for operating instructions.
- ☐ Check door opening and closing. If door does not open and close freely or tends to fall, check spring adjustments. See Step 1.
- ☐ Check to be sure that wiring is secure under the dishwasher, not pinched or in contact with door springs or other components. See Step 9.
- ☐ Check door alignment with tub. If door hits tub, level dishwasher. See Step 10.
- ☐ Pull lower rack out, about halfway. Check to be sure it does not roll backward or forward on to the door. If the rack moves, adjust leveling legs. See Step 10.
- ☐ Check door alignment with cabinet. If door hits cabinet, reposition or re-level dishwasher. See Step 10.
- ☐ Verify water supply and drain lines are not kinked or in contact with other components. Contact with motor or dishwasher frame could cause noise. See Step 8.
- ☐ Turn on the sink hot water faucet and verify water temperature. Incoming water temperature must be between 49ºC (120ºF) and 65.5ºC (150ºF). A minimum of 49ºC temperature is required for best wash performance. See " Prepare Hot Water Line", page 4.
- ☐ Add two quarts of water to the bottom of the dishwasher to lubricate the pump seal.
- ☐ Turn on water supply. Check for leaks. Tighten connections if needed.
- ☐ Remove protective film if present from the control panel and door.

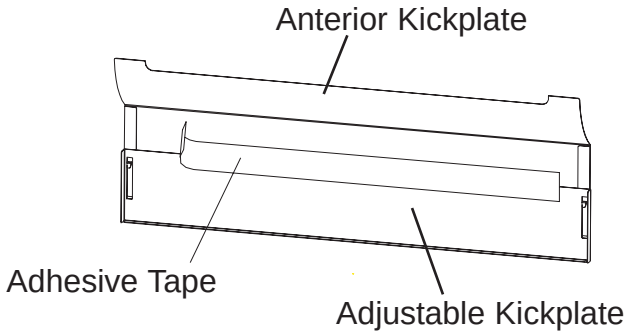
INSTALLATION INSTRUCTIONS

STEP 15 DISHWASHER WET TEST

- ☐ Turn on power.
- ☐ Make sure door is closed.
- ☐ Select “Normal” wash program.
- ☐ Check to be sure that water enters the dishwasher. If water does not enter the dishwasher, check to be sure that water and power are turned on.
- ☐ Check for leaks under the dishwasher. If a leak is found, turn power supply off, then tighten connections. Restore power after leak is corrected.
- ☐ Check for leaks around the door. A leak around the door could be caused by the door rubbing or hitting again adjacent cabinetry. Reposition the dishwasher if necessary. See Step 9.
- ☐ The dishwasher will drain and turn off about 5 to 7 minutes after the first fill. Check drain lines. If leaks are found, turn power off at the breaker and correct plumbing as necessary, Restore power after corrections are made. See Step 12.
- ☐ Open dishwasher door and make sure most of the water has drained. If not, check that the disposer plug has been removed and/or air gap is not plugged. See Step 13. Also check drain line for kinking.
- ☐ Run the dishwasher through another fill and drain cycle. Check for leaks and correct if required.
- ☐ At the end of drain cycle; open door and turn off power.

STEP 16 REPLACE KICKPLATE





- Tear down the adhesive tape on the kickplate.
- Place both kick plate pieces against the kickplate bracket, let the two hooks of the anterior kickplate align with the slot of the adjustable kickplate, then the two hooks align the short slot of the kickplate bracket, let the hook be fastened to the kickplate.
- Install 2 kickplate screws to fasten anterior kickplate. Allow the adjustable kickplate to touch the floor.

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STEP 17 LITERATURE

Be sure to leave complete literature package and installation instructions with consumer.

Continuing research results in steady improvement. Therefore, this information and these specifications are subject to change without notice.